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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/602,744

06/25/2003

Myoung-Kee Baek

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01/13/2006

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EXAMINER

FERGUSON, MARISSA L

ART UNIT

PAPER NUMBER

2854

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/602,744	BAEK ET AL	
	Examiner	Art Unit	
	Marissa L. Ferguson	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (US Patent 5,514,503) in view of Miyazaki et al. et al. (US Patent 6,445,437).

Regarding claims 1, 3 and 10, Evans et al. teaches providing a cliché (14) having a plurality of grooves (Figure 2 and Column 5, Lines 36-60), filling Red, Green and Blue colored inks into the grooves of the cliché (Column 6, Lines 7-10), repositioning the Red, Green and Blue colored inks (Column 6, Lines 11-13), transferring the colored inks filled in the grooves of the cliché onto a printing roll (14) by rotating the printing roll (14) on the cliché in which the Red, Green and Blue colored inks are filled (Column 9, Lines 20-29) and applying the Red, Green and Blue colored inks on the printing roll onto of the substrate by rotating the printing roll across the substrate (column 10, Lines 38-45). However, he does not explicitly disclose providing a substrate, which is divided into an active area for realizing image and a dummy area for not realizing image areas.

Miyazaki et al. teaches a system for fabricating a liquid crystal display with a substrate (30) divided into a display area and a non-display area (Figures 1,2). It would have been obvious at the time the invention was to a person having ordinary skill in the

art to modify the invention as taught by Evans to include an active area and a dummy area as taught by Miyazaki et al., since Miyazaki et al. teaches the areas in order to reduce display defects and exhibit high display performance.

Regarding claim 2, Evans et al. teaches wherein filling includes placing the Red, Green and Blue colored inks into the grooves of the cliché concurrently (Column 10, Lines 51-64)

Regarding claim 4, Evans et al. teaches wherein applying includes rolling the printing roll only once across the substrate (Figure 4 and Column 10, Lines 44-48).

Regarding claims 5 and 12, Evans et al. teaches forming a black matrix on the substrate between the Red, Green and Blue colored inks on the active area (Figure 4, Lines 1-13).

2. Claims 6-9, 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (US Patent 5,514,503) in view of Miyazaki et al. (US Patent 6,445,437) as applied to claim 1 above, and further in view of Kobayashi et al. (JP 404134401).

Regarding claims 6, 8, 9, 11 and 13, Evans et al. and Miyazaki et al. teaches the apparatus and method claimed including wherein Red, Green and Blue color inks of the substrate are formed in at least one or more pixels when it is assumed that respective red, green and blue sub-pixels are defined as one pixel as disclosed in Evans et al. (column 7, Lines 64-67). However, Evans et al. or Miyazaki et al. do not explicitly disclose forming a black matrix between the Red, Green and Blue ink/filter colored on the dummy area. Kobayashi et al. teaches a black matrix (36) formed between colored filters (18R, 18G, 18B) in a dummy area (30). It would have been obvious at the time

the invention was to a person having ordinary skill in the art to further modify the invention as taught by Evans to include forming the colored filter on a dummy area as taught by Koyabashi et al., since Koyabashi et al. teaches to avert degradation in printing accuracy.

Regarding claim 7, Evans et al. teaches wherein forming a black matrix includes patterning a thermoplastic resin (Column 5, Lines 36-60).

Response to Arguments

3. Applicant's arguments with respect to claims 1-13 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marissa L. Ferguson whose telephone number is (571) 272-2163. The examiner can normally be reached on (M-T) 6:30am-4:00pm and every other (F) 7:30am-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Marissa L Ferguson
Examiner
Art Unit 2854

MLF

A handwritten signature in black ink, appearing to read "Andrew H. Hirshfeld", is written over a horizontal line.

**ANDREW H. HIRSHFELD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800**